

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Currently Amended) The optical wireless transmission apparatus according to claim [[1]] 5, wherein the light receiving device comprises: a light receiving layer formed of GaInAsP having a band gap energy corresponding to 960 nm on an InP substrate; and a light absorbing layer formed of GaInAsP having a band gap energy corresponding to 930 nm on the light receiving layer.
3. (Canceled)
4. (Canceled)
5. (New) An optical wireless transmission apparatus comprising:
a light emitting device that emits a data signal light obtained by modulating a data signal;
a first lens that shapes the data signal light emitted from the light emitting device into approximately parallel beams;
a beam splitter that reflects a part of an incoming light and transmits a remainder thereof;
an optical reflection system having a reflection plate that reflects an incoming light and a driving section that changes a deflection angle of the reflection plate with respect to an axis of the incoming light;
a second lens that condenses a data signal light and a pilot light transmitted from a target apparatus;

a light receiving device that receives the data signal light and the pilot light transmitted from the target apparatus and condensed by the second lens; and

a pilot light emitting section provided ahead of the beam splitter and the optical reflection system and close to a path of the data signal light emitted from the light emitting device and reflected by the beam splitter and the data signal light and the pilot light transmitted from the target apparatus, the pilot light emitting section emitting the pilot signal toward the target apparatus,

wherein the data signal light emitted from the light emitting device is shaped into approximately parallel beams by the first lens, transmitted through the beam splitter, reflected into a predetermined direction by the optical reflection system, and transmitted toward the target apparatus, the pilot light emitted from the pilot light emitting section is transmitted directly toward the target apparatus not via the beam splitter and the optical reflection system, and the data signal light and the pilot light transmitted from the target apparatus is reflected by the optical reflection system, reflected by the beam splitter, transmitted through the second lens, and received by the light receiving device, and

wherein a wavelength region of the pilot light ranges from 930 nm to 960 nm and the light receiving device has a light receiving sensitivity only in a wavelength region of 930 nm to 960 nm.

6. (New) An optical wireless transmission apparatus comprising:
 - a light emitting device that emits a data signal light obtained by modulating a data signal;
 - a first lens that shapes the data signal light emitted from the light emitting device into approximately parallel beams;
 - a beam splitter that reflects a part of an incoming light and transmits a remainder thereof;

an optical reflection system having a reflection plate that reflects an incoming light and a driving section that changes a deflection angle of the reflection plate with respect to an axis of the incoming light;

a second lens that condenses a data signal light and a pilot light transmitted from a target apparatus;

a light receiving device that receives the data signal light and the pilot light transmitted from the target apparatus and condensed by the second lens; and

a pilot light emitting section provided ahead of the beam splitter and the optical reflection system and close to a path of the data signal light emitted from the light emitting device and reflected by the beam splitter and the data signal light and the pilot light transmitted from the target apparatus, the pilot light emitting section emitting the pilot signal toward the target apparatus,

wherein the data signal light emitted from the light emitting device is shaped into approximately parallel beams by the first lens, transmitted through the beam splitter, reflected into a predetermined direction by the optical reflection system, and transmitted toward the target apparatus, the pilot light emitted from the pilot light emitting section is transmitted directly toward the target apparatus not via the beam splitter and the optical reflection system, and the data signal light and the pilot light transmitted from the target apparatus is reflected by the optical reflection system, reflected by the beam splitter, transmitted through the second lens, and received by the light receiving device, and

wherein a wavelength region of the pilot light ranges from 930 nm to 960 nm and a filter that passes only a light in a wavelength region of 930 nm to 960 nm is provided ahead of the optical reflection system receiving the data signal light and the pilot light transmitted from the target apparatus.

7. (New) An optical wireless transmission apparatus comprising:
a light emitting device that emits a data signal light obtained by modulating a data signal;
a first lens that shapes the data signal light emitted from the light emitting device into approximately parallel beams;
a beam splitter that reflects a part of an incoming light and transmits a remainder thereof;
an optical reflection system having a reflection plate that reflects an incoming light and a driving section that changes a deflection angle of the reflection plate with respect to an axis of the incoming light;
a second lens that condenses a data signal light and a pilot light transmitted from a target apparatus;
a light receiving device that receives the data signal light and the pilot light transmitted from the target apparatus and condensed by the second lens; and
a pilot light emitting section provided ahead of the beam splitter and the optical reflection system and close to a path of the data signal light emitted from the light emitting device and reflected by the beam splitter and the data signal light and the pilot light transmitted from the target apparatus, the pilot light emitting section emitting the pilot signal toward the target apparatus,
wherein the data signal light emitted from the light emitting device is shaped into approximately parallel beams by the first lens, transmitted through the beam splitter, reflected into a predetermined direction by the optical reflection system, and transmitted toward the target apparatus, the pilot light emitted from the pilot light emitting section is transmitted directly toward the target apparatus not via the beam splitter and the optical reflection system, and the data signal light and the pilot light transmitted from the target apparatus is reflected by the optical reflection system, reflected by the beam splitter, transmitted through the second lens, and received by the light receiving device, and

wherein a wavelength region of the pilot light ranges from 930 nm to 960 nm, a filter that passes only a light in a wavelength region of 930 nm to 960 nm is provided ahead of the optical reflection system receiving the data signal light and the pilot light transmitted from the target apparatus, and the light receiving device has a light receiving sensitivity only in a wavelength region of 930 nm to 960 nm.